APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,957	10/26/2001	Chris Ryan	000244	7049

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EXAMINER
PHILLIPS, HASSAN A

ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
10/032,957</td><td>Applicant(s)
RYAN, CHRIS</td><td></td></tr>
<tr><td>Examiner
Hassan Phillips</td><td>Art Unit
2151</td><td></td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>10 March 2006</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-12</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-12</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>29 April 2002</u> is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/30/04</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to communications filed March 10, 2006. Claims 1-20 were subjected to election/restriction requirement. The applicants have elected Invention A, claims 1-12. Claims 13-20 have been canceled without prejudice or disclaimer.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "250" has been used to designate both "CLK" and "DMA CONTROLLER". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are further objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: DMA/microprocessor memory interface 260 (see page 7). Corrected

drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office

action to avoid abandonment of the application. Any amended replacement drawing

sheet should include all of the figures appearing on the immediate prior version of the

sheet, even if only one figure is being amended. Each drawing sheet submitted after the

filing date of an application must be labeled in the top margin as either "Replacement

Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by

the examiner, the applicant will be notified and informed of any required corrective

action in the next Office action. The objection to the drawings will not be held in

abeyance.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102

that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-3, are rejected under 35 U.S.C. 102(e) as being anticipated by Khan

et al. (hereinafter Khan), U.S. Patent 6,754,509. The applied reference has a common

assignee with the instant application. Based upon the earlier effective U.S. filing date of

the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35

U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any

invention disclosed but not claimed in the reference was derived from the inventor of

this application and is thus not the invention "by another," or by an appropriate showing

under 37 CFR 1.131.

6. In considering claim 1, Khan discloses a system for partitioning and loading

data in a low-powered communication device, the system comprising: a general

computing subsystem (104), (col. 4, lines 27-53); a modem computing subsystem (102),

(col. 4, lines 27-53); a clock, (col. 5, lines 21-53); and a shared memory module for

receiving a binary data, wherein the shared memory module may be accessed by the

general computing subsystem and the modem computing subsystem independently,

and wherein the general computing subsystem selectively activates the clock to the

shared memory module to permit use of the shared memory module by the modem

computing subsystem, (col. 4, line 54-col. 5, line 53).

7. In considering claim 2, Khan discloses the modem computing subsystem

controls data processing in accordance with wireless communication protocols, (col. 4,

lines 27-53).

8. In considering claim 3, Khan discloses the modem computing subsystem

further comprising a mobile station wireless modem, (col. 4, lines 27-53).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-12, are rejected under 35 U.S.C. 103(a) as being unpatentable over

Guterman, U.S. Patent Pub. No. 2003/0008690, in view of DeRoo et al. (hereinafter

DeRoo), U.S. Patent 6,161,162.

11. In considering claim 1, Guterman discloses a system for partitioning and

loading data in a low-powered communication device, the system comprising: a general

computing subsystem (24), (page 1, paragraph 15); a modem computing subsystem

(12), (page 1, paragraph 15); and a shared memory module for receiving a binary data,

wherein the shared memory module may be accessed by the general computing

subsystem and the modem computing subsystem independently, (page 1, paragraph

16).

Although the teachings of Guterman disclose substantial features of the claimed

invention, they fail to expressly disclose: a clock, and the general computing subsystem

selectively activating the clock to the shared memory module to permit use of the

shared memory module by the modem computing subsystem.

Nevertheless, in a similar field of endeavor DeRoo teaches a clock, and a

general computing subsystem selectively activating the clock to a shared memory

module to permit use of the shared memory module by an alternate computing

subsystem, (col. 81, line 37-col. 84, line 46).

Thus, if not implicit in the teachings of Guterman, given the teachings of DeRoo it

would have been obvious to one of ordinary skill in the art to modify the teachings of

Guterman to disclose a clock, and the general computing subsystem selectively

activating the clock to the shared memory module to permit use of the shared memory

module by the modem computing subsystem. This would have advantageously

provided an efficient means for accessing a single memory, thereby saving cost and

space savings, (DeRoo, col. 2, lines 8-32).

12. In considering claim 2, Guterman discloses the modem computing subsystem

controls data processing in accordance with wireless communication protocols, (page 1,

paragraph 15).

13. In considering claim 3, Guterman discloses the modem computing subsystem

further comprising a mobile station wireless modem, (page 1, paragraph 15).

14. In considering claim 4, although the teachings of Guterman disclose

substantial features of the claimed invention, they fail to expressly disclose: the general

computing subsystem further comprising a nonvolatile memory that stores information for generating data.

Nevertheless, general computing subsystems comprising nonvolatile memory that stores information for generating data was well known in the art at the time of the present invention. DeRoo discloses a general computing subsystem comprising a nonvolatile memory that stores information for generating data, (col. 1, lines 36-63).

Thus, if not implicit in the teachings of Guterman, given the teachings of DeRoo it would have been obvious to one of ordinary skill in the art to modify the teachings of Guterman to disclose the general computing subsystem further comprising a nonvolatile memory that stores information for generating data. This would have advantageously provided a memory that could be used to store information to "boot up" the subsystem, or perform light duty housekeeping, (DeRoo, col. 1, lines 36-63).

15. In considering claim 5, it is implicit in the teachings of Guterman that the general computing subsystem loads the data into the shared memory module, (page 1, paragraph 16).

16. In considering claim 6, the combined teachings of Guterman and DeRoo provide a means for the general computing subsystem to generate the data from compressed information stored in the nonvolatile memory, (Guterman, page 1, paragraph 16, DeRoo, col. 1, lines 36-63). One of ordinary skill in the art would combine the teachings of Guterman with DeRoo for reasons previously indicated.

17. In considering claim 7, Guterman discloses a portable wireless
communication device, the device comprising: a memory (14), (page 1, paragraph 16);
a general computing subsystem (24) having access to the memory, (page 1, paragraph
15); a modem computing subsystem (12), (page 1, paragraph 15); and a first shared
memory module for receiving a binary data, wherein the shared memory module may
be accessed by the general computing subsystem and the modem computing
subsystem independently, (page 1, paragraph 16).

Although the teachings of Guterman disclose substantial features of the claimed
invention, they fail to expressly disclose: the memory being nonvolatile, and the general
computing subsystem selectively enabling or disabling the shared memory module to
permit use of the shared memory module by the modem computing subsystem.

Nevertheless, general computing subsystems comprising nonvolatile memory
that stores information for generating data was well known in the art at the time of the
present invention. DeRoo discloses a general computing subsystem comprising a
nonvolatile memory that stores information for generating data, (col. 1, lines 36-63).
DeRoo also teaches a general computing subsystem selectively enabling or disabling a
shared memory module to permit use of the shared memory module by an alternate
computing subsystem, (col. 81, line 37-col. 84, line 46).

Thus, if not implicit in the teachings of Guterman, given the teachings of DeRoo it
would have been obvious to one of ordinary skill in the art to modify the teachings of
Guterman to disclose the memory being a nonvolatile memory. This would have

advantageously provided a memory that could be used to store information to "boot up" the subsystem, or perform light duty housekeeping, (DeRoo, col. 1, lines 36-63). It also would have been obvious to one of ordinary skill in the art to modify the teachings of Guterman to disclose the general computing subsystem selectively enabling or disabling the shared memory module to permit use of the shared memory module by the modem computing subsystem. This would have advantageously provided an efficient means for accessing a single memory, thereby saving cost and space savings, (DeRoo, col. 2, lines 8-32).

18. In considering claim 8, the teachings of Guterman provide a means for the first binary memory image comprising mobile station code sufficient to permit the modem computing subsystem to establish a wireless communication link and monitor a paging channel, (page 1, paragraph 15).

19. In considering claim 9, the teachings of Guterman provide a means for the modem computing subsystem and the first shared memory to be enabled when the computing subsystem starts to monitor the paging channel, and the modem computing subsystem and the first shared memory module are disabled when not engaged in wireless communications, (page 1, paragraph 15-page 2, paragraph 23).

20. In considering claim 10, although the teachings of Guterman disclose substantial features of the claimed invention, they fail to expressly disclose: a second shared memory.

Nevertheless, multiple memories were well known in the art at the time of the present invention. DeRoo discloses it was well known that multiple memories were necessary for multiprocessing systems, (col. 1, lines 36-46).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Guterman to disclose a second shared memory module, wherein the second shared memory module is independently accessible by the general computing subsystem and the modem computing subsystem, wherein the second shared memory module can be disabled by the general computing subsystem to save power, and wherein a second binary image is loaded in the second shared memory module from the nonvolatile memory by the general computing subsystem. This would have advantageously provided additional memory that could be used store information to "boot up" the subsystem, or perform light duty housekeeping, (DeRoo, col. 1, lines 36-63)..

21. In considering claim 11, the combined teachings of Guterman and DeRoo provide a means for the second binary memory image to contain the mobile station modem code sufficient to operate a traffic channel, (Guterman, page 1, paragraph 15, DeRoo, col. 1, lines 36-63). One of ordinary skill in the art would combine the teachings of Guterman with DeRoo for reasons previously indicated.

22. In considering claim 12, the combined teachings of Guterman and DeRoo provide a means for the second shared memory module to be activated when the modem computing subsystem operates a traffic channel, and the second memory module to be deactivated to save power when ceasing to operate the traffic channel, (Guterman, page 1, paragraph 15-page 2, paragraph 23, DeRoo, col. 1, lines 36-63). One of ordinary skill in the art would combine the teachings of Guterman with DeRoo for reasons previously indicated.

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HP/
5/23/06

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